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905 West End Avenue, 62
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EDUCATION

Columbia University, Columbia College, New York, NY

B.A. Candidate 2014

Major: Computer Science; *Concentration:* Physics

Major Grade Point Average: 3.55; *Overall:* 3.41

Relevant Coursework: Advanced Programming in C, C++, and UNIX; Advanced Data Structures; Cryptography; Graph Theory; Computer Networks; Programming Languages and Translators; AI; UI Design; Operating Systems; Data Science; Computer Vision

Phillips Academy Andover, Andover, MA

2006 – 2010

Honors Student; AP Scholar with Distinction; SAT 99th percentile

WORK EXPERIENCE

Optimizely, Software Engineer, San Francisco, CA

Summer 2014 – Present

Nomis Solutions, Optimization Software Engineer Intern, San Bruno, CA

Summer 2013

- Worked with Optimizations and Engineering teams to develop market financial pricing optimization software
- Developed caching scheme to halve total computation time
- Modified computation parameters schema to incorporate expanded variable set enabling more efficient optimization
- Documented computational software data and provided business-friendly interpretation to be used in software demonstrations

Columbia University, Teaching Assistant, New York, NY

2013 – Present

- Courses include Honors Introduction to Computer Science and Programming Languages and Translators
- Support student learning through weekly lectures, office hours, one-on-one meetings, and online forums
- Aided in the design of homework and practice problems and grading of exams and homework for over one hundred students

Condé Nast, Mobile App Product Development Intern, New York, NY

Summer 2012

- Created several mobile app concepts, developed functionality, user interface, and marketing and business strategies
- Participated in cost and design meetings with third-party application design and development firms
- Formally presented app concept and design to magazine brands for review and funding

Columbia University, Kim Group, Research Assistant, New York, NY

2011 – 2012

- Measured thermopower in Graphene on BN samples in Helium cryostasis chamber
- Worked frequently in a clean room environment, involving use of strong acids and precision measurement and fabrication equipment including AFM, SEM, e-beam evaporator and cryostat control and measurement software

ATHLETICS

Columbia Men's Varsity Swim Team, NCAA Division I

2010 – 2012

- 2012 Pool Record Holder 200 freestyle Relay
- Best Times: 50 freestyle: 20.89; 100 freestyle: 47.60
- Trained 20+ hours weekly, including 6:30 A.M. practice daily

ACTIVITIES AND PROJECTS

Application Development Initiative

2013 – Present

- As part of the Infrastructure Team, helping redesign and develop several web-applications for the Columbia student body including university data API and interactive course scheduler

Linger.io

Spring 2013

- At Columbia University hackathon, DevFest, created a Python Flask web app to allow users to view their phone's contacts and message threads, as well as send and receive messages and calls directly from within the app
- Linger won DevFest's *Best Use of Twilio* award. I am continuing development of the app and its business model in an Entrepreneurship class at Columbia

WDJC: The WHET DJ Language Compiler for Musical Composition

Fall 2013

- Semester-long project for Columbia Programming Languages and Translators (COMSW4115) course: as Team Leader, with 3 teammates, created and formalized the DJ Programming Language for MIDI musical composition; designed and implemented the WDJC compiler for the DJ language, producing MIDI sound files from DJ source

Columbia University Society of Automotive Engineers

2010 – 2013

- As System Head for Controls, participated in the building of a Formula-style racecar for competition with other universities and professional teams worldwide; role involved design of a new space-efficient and lightweight pedal and control system
- Designed and implemented new impact attenuator design, based on EPS insulation foam, to reduce weight and improve the car's efficiency; implementation involved static and quasi-static testing and energy-absorption analysis

SKILLS

- Experienced in HTML, CSS, JS, Python, Flask, SQL, TeX, JAVA, C, OCaml and Ruby on Rails programming languages
- Electrical Engineering, computer design and circuit analysis and creation of several projects, including reaction tester and computer-controlled thermal bitmap printer
- Woodwork and Fine Cabinetry, design and construction of various projects including tables, games, machines, and bookcases as well as a 14-foot skiff built from raw materials